

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO Box 1450 Alexandran, Virginia 22313-1450 www.emplo.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--------------------------------------|---------------------|----------------------|---------------------|------------------|--|
| 10/539,316 | 06/15/2005 | Jan Van Sinderen | NI 021368 | 2475 | |
| 65913 NXP, B, V, | 7590 12/23/2008 EXA | | IINER | | |
| NXP INTELLECTUAL PROPERTY DEPARTMENT | | | NGUYEN | NGUYEN, DUC M | |
| M/S41-SJ 1109 MCKAY DRIVE | | | ART UNIT | PAPER NUMBER | |
| SAN JOSE, CA 95131 | | | 2618 | | |
| | | | | | |
| | | | NOTIFICATION DATE | DELIVERY MODE | |
| | | | 12/23/2008 | ELECTRONIC | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail $\,$ address(es):

ip.department.us@nxp.com

Art Unit: 2618

Response to Arguments

 Applicant's arguments filed 12/5/08 have been fully considered but they are not persuasive.

In the response, Applicant contends that

In the Final Office Action dated October 6, 2008, the following rejections are present; claims 1-5 and 7 stand rejected under U.S.C. § 112(1); claim 10 stands rejected under U.S.C. § 103(a) over the Ichihara reference (US Patent No. 7,206,360); claims 1-5 stand rejected under U.S.C. § 103(a) over the Ichihara reference in view of the Birleson reference (U.S. Patent No. 6.177.964); claim 7 stands rejected under U.S.C. § 103(a) over the Ichihara reference in view of the Birleson reference and in further view of the Leenaert reference (US Patent No. 6,999,745); and claim 9 stands rejected under U.S.C. § 103(a) over the Ichihara reference in view of the Birleson reference and further in view of the Olson reference (US Patent No. 7,050,778). The drawings are objected to, and claims 6 and 8 are noted as being allowed. Applicant traverses all of the rejections and, unless explicitly stated by the Applicant, does not acquiesce to any objection, rejection or averment made in the Office Action. In response to the objection to the drawings, Applicant submits that the components that provide separation of the audio signal from the video signal are already illustrated in the Figures. For example, with reference to item "3" of Figure 2, Applicant's Specification explains at paragraph 39 (USPTO's published version) that the mixer block 3, which shows four separate mixers (multipliers), is useful for translating input signals into outputs of many types, including one type which is an audio signal of a mobile phone call and another type which is a camera picture from a mobile phone.

In response, the examiner asserts that one skilled in the art would recognize that para [0039] describes the mixer 3 that can receive many types of signals and would output **the same type of signal** inputted to the mixer 3. However, it does not describes the separation of audio and video signal. More specifically, which function would perform such separation?

At paragraph 41 (USPTO's published version), the Specification goes on to explain that two of the mixers in mixer block 3 are used to translate "an input signal through mixing or multiplying said input signal with a local oscillator signal. This results in a wanted signal and an unwanted image signal."

In response, the examiner asserts that one skilled in the art would recognize that para [0041] describes each mixer would perform a frequency translation that would produce a wanted signal (an IF or baseband signal) and an unwanted signal (an image frequency signal).

Art Unit: 2618

Thus, for mobile phone signals, two of the four mixers of mixer block 3 process the mobile phone signals for the audio signal (the wanted signal and an unwanted image signal) and one or more of the other two illustrated mixers of mixer block 3 process the mobile phone signals for a camera picture from a mobile phone.

In response, the examiner asserts that para [0041] does not describes the features as speculated/alleged by Applicant in the above paragraphs. In addition, just the sake of argument, assume that if two of the mixers would process audio signal, and two of the mixers would process camera signal, the signal would have been separated or splitted before inputting to the mixers, not after as claimed. Here, Applicant needs to specific point out what function would perform the separation? and how? the specification should clearly address this limitation.

Further, as shown in connection with each of Figures 1-4 and emphasized at paragraphs 30 and 52 (USPTO's published version), the outputs can be compensated to reduce the image suppression at low frequencies. Accordingly, at least Figure 2 illustrates the components that provide separation of the audio signal from the video signal. As this illustrated aspect may not have been recognized earlier by the Examiner, should there be any remaining concern or question, a clarifying phone call to the undersigned might be helpful as Applicant would gladly consider a suggested modification to the figures as may be appropriate. Based on the current objection, Applicant respectfully requests that the objection be withdrawn.

In response, the examiner asserts that Fig. 2 does not provide any component that would provide separation of audio and picture from the video signal. Again, what function would perform the separation? Just put in a mixer in Fig. 2 and it would do it? Here, if the limitation of separating audio and picture from the video signal would involve a patentability feature, it should be clearly described in the specification.

Applicant respectfully traverses the rejection of claims 1-5 and 7 under U.S.C. § 112(1). As explained at length above with reference to Applicant's originally-filed specification, Applicant respectfully submits that the written description requirement has been more than satisfied by way of explicit language and illustrations in Applicant's originally-filed specification. Applicant respectfully submits that the rejection must be withdrawn Application/Control Number: 10/539,316 Page 4

Art Unit: 2618

In response, the examiner asserts that the claimed invention only describes a frequency translation of a signal, where the signal could be an audio signal, a video signal or a picture signal. The separation of a picture and audio from a video signal would have been obviously performed similarly to the prior art (i.e, by utilizing a splitter, a mixer or a splitter to split the signal into two signal paths of different frequency). If Applicant contends that the mixer 3 of the claimed invention would be able of doing such separation, Applicant is invited to specifically point out what component(s) and how would the component(s) be able to do the separation (i.e, from video to picture and audio). In particular, the specification should be amended to precisely and clearly describe this separation function, not just an abstract idea (Quote: The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention).

Applicant further contends that

Applicant has cancelled claim 10 and thereby submits that the rejection under U.S.C. § 103(a) over the Ichihara reference is rendered moot. Applicant traverses the rejections of claims 1-5, of claim 7 and of claim 9, each rejection presented under U.S.C. § 103(a) over the Ichihara reference in view of at least the Birleson reference. Each of these rejection must be withdrawn because the Ichihara reference teaches away from the asserted combination of teachings and because the proposed combination would be inoperable generally and specifically for the stated purposes of the Ichihara reference. As reiterated by the Supreme Court's recent KSR decision, where the main reference teaches away from the asserted combination of teachings, there is no motivation. Relative to a long line of authoritative cases, the MPEP explains this principle at § 2143.01:§103 rejection cannot be maintained when the asserted modification undermines purpose or operation of the main reference. For each of the § 103(a) rejections, the asserted modification would involve use of Birleson's mixers 121 and 122 as replacements to the double-balanced mixers 32

Art Unit: 2618

and 33 of the Ichihara reference in order "to modify Ichihara to provide the mixer to frequency translating a video signal to a video image data as claimed." This combination of teachings is illogical for various reasons of inoperability; it should be sufficient to note Ichihara's purpose of correcting an amplitude deviation between the I and Q components of the same signal before recombining (as opposed and entirely unrelated to separating audio and video signals) these signals at the amplitude comparison circuit 2 of Ichihara's Figure 4. Thus, the Court has reminded us that, "A patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently, known in the prior art." KSR Int'l Co. v. Teleflexinc., 127 S. Ct. 1727, 1741 (U.S. 2007). Accordingly, the remaining § 103(a) rejections must be withdrawn.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, although Ichihara is silent with a video signal, it is noted that the transmission of a video signal in a mobile phone with a camera mounted is well known at the time the invention was made. Therefore, in order to separate the video signal into a picture signal and audio signal for displaying the picture on a display and producing sound from a speaker, it would have been obvious to one skilled in the art to modify Ichihara to utilizing several frequency translation stages (read here: not incorporate mixers in Birleson to Ichihara) in the similar way as disclosed by Birleson that separates a TV signal to a picture signal and an audio signal. By doing so, Ichihara as modified would comprise a frequency translation stage that would separate the picture signal from the video signal as claimed.

Art Unit: 2618

However, by analyzing claimed limitations of the claim 1, it appears that the claim recites a single frequency translation stage that would convert a video signal to a picture signal and an audio signal simultaneously, the examiner does not believe such conversion exist and/or described in the specification. Therefore, the 35 USC, 112 first paragraph rejection would be maintained and an objection to the drawing would also be maintained as well. Here, if the limitation of separating audio and picture from the video signal would involve a patentability feature, it should be clearly described in the specification.

For foregoing reasons, the examiner believes that the pending claims (1-5, 7, 9) are not allowable over the cited prior art.

Any response to this action should be mailed to:

Box A.F.

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for **formal** communications intended for entry)

(571)-273-7893 (for informal or draft communications).

Hand-delivered responses should be brought to Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry concerning this communication or communications from the examiner should be directed to Duc M. Nguyen whose telephone number is (571) 272-7893, Monday-Thursday (9:00 AM - 5:00 PM).

Application/Control Number: 10/539,316 Page 7

Art Unit: 2618

Or to Nay Maung (Supervisor) whose telephone number is (571) 272-7882.

/Duc M. Nguyen/

Primary Examiner, Art Unit 2618

Dec 16, 2008